Appl. No. 10/512,009

Amdt. Dated October 6, 2009

Reply to Office action of April 16, 2009

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

 (Currently amended) A method for <u>selecting volunteer patients for a clinical trial by</u> phenotyping of a <u>group of several</u> human individual comprising determining in vivo CYP 450 —protein activity and thereby obtaining a characteristic of said human individual, the determination comprising

a) hyperpolarising the NMR active nuclei of samples collected from a human individual
preadministered with at least more than one probe compound containing at least one
NMR active nuclei, wherein the probe compounds are substrates, inducers or
inhibitors for CYP 450; and

b) analysing said samples by NMR spectroscopy;

 c) comparing said characteristic of said human individual with characteristics of the other of said several human individuals;

 d) grouping said human individuals who exhibit the same or similar characteristics into groups of volunteer patients showing a specific phenotype; and

e) selecting a group of volunteer patients obtained from step d) for use in a clinical trial.

3.	(Cancelled).
4.	(Cancelled).
5.	(Cancelled).

(Cancelled).

(Cancelled).

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7. (Cancelled).

(Cancelled).

9. (Currently amended) The method according to claim <u>81</u>, further comprising the step

of phenotyping of said human individual prior to said human individual receiving a

therapeutic drug treatment.

10. (Previously presented) The method according to claim 1, wherein the at least one

probe compound is enriched with NMR active nuclei.

11. (Previously presented) The method according to claim 1, wherein hyperpolarisation is

carried out by means of polarisation transfer from a noble gas, brute force, dynamic

nuclear polarisation (DNP) or spin refrigeration.

12. (Previously presented) The method according to claim 1, wherein the collected

samples are biofluids.

13. (Cancelled).

14. (Cancelled).

15. (Currently amended) The method according to claim 14, wherein the at least one

probe compound is a substrate, inducer or inhibitor for a CYP 450 isoenzyme selected

from the group consisting of CYP1A2, CYP2A6, CYP2C8/9, CYP2C19, CYP2D6,

CYP2E1 and CYP3A4.

16. (Previously presented) The method according to claim 1, wherein the at least one

probe compound is selected from the group consisting of phenacetin, coumarin,

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tolbutamide, phenytoin, mephenytoin, S-mephenytoin, bufuralol, chlorzoxazone, midazolam, caffeine, dapsone, diclofenac, debrisoquine, bupropion, antipyrine, dextromethorphan, warfarin, diazepam, alprazolam, triazolam, flurazepam, chlodiazepoxide theophylline, phenobarbital propranolol, metoprolol, labetalol, nifedipine, digitoxin, quinidine, mexiletine, lidocaine, imipramine, flurbiprofen, omeprazole, terfenadine, furafylline, codeine, nicotine, sparteine, erythromycin, benzoylcholine, butrylcholine, paraoxon, para-aminosalicylic acid, isoniazid, sulfamethazine, 5-fluorouracil, trans-stilbene oxide, D-penicillamine, captopril, ipomeanol, cyclophosphamide, halothane, zidovudine, testosterone, acetaminophen, hexobarbital, carbamazepine, cortisol, oltipraz, cyclosporin A and paclitaxel.